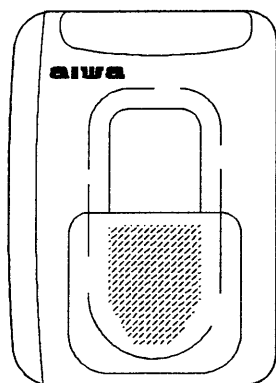


aiwa



HS-JS145 HS-JS145V HS-JS145W HS-JS147W



STEREO RADIO CASSETTE RECORDER

• BASIC TAPE MECHANISM : HT23-09-01

• TYPE: Y,YJ,YL,YZ,YV(145V),
YU(145W),YU(147W)

SPECIFICATIONS

Frequency range:	AM :	530 – 1,605 kHz (except WYU)			Alkaline batteries (LR6)
	AM :	530 – 1710 kHz (WYU)			Approx. 16 hours
	FM :	87.5 – 108 MHz (except YV)			Recording (EIAJ, 1mW)
	FM :	65 – 108MHz (YV)			Manganese batteries (R6P)
Maximum output :	Y,YJ,YL,YZ :	15 mW + 15 mW (EIAJ 32 Ω)	Maximum dimensions	Weight :	Approx. 4 hours
		20mW + 20 mW (EIAJ 16 Ω)			Alkaline batteries (LR6)
	YU :	15mW +15mW (EIAJ 32 Ω)			Approx. 13.5 hours
	YV:	20mW + 20mW (EIAJ 16 Ω)			93.5(W)x 123 (Hx 39.5(D) mm
Power source :		15 mW (EIAJ 4 Ω)	• Design and specifications are subject to change without notice.		Approx. 245 g (excluding batteries)
		Battery DC 3V, R6 (size AA) x 2			
		AC power using the optional AC adaptor AC-620 or AC 300			
		AC power using the optional AC adaptor AC-620 (HS-JS147W only)			
Speaker :		Diameter 36 mm,4 Ω			
Battery life :		Tape playback (EIAJ, 6mW)			
		Manganese batteries (R6P)			
		Approx. 5 hours			
		Alkaline batteries (LR6)			
		Approx. 16 hours (EIAJ,1mW)			
		Manganese batteries (RP6)			
		Approx. 5 hours			

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC				C234	87-016-073-080		CAP,E 1MFD-50V
	87-001-379-010		IC,TA8122AF	C237	87-010-822-080		CAP,E 220MFD-4V
	S5-070-150-000		IC,AN7015S	C240	87-010-629-080		CAP,E 4.7MFD-10V
	87-002-232-080		IC,NJM2073M	C305	87-010-044-080		CAP,E 47-4V
	S6-022-000-010		IC,UPC2200GR	C306	87-010-044-080		CAP,E 47-4V
	87-017-643-080		IC,MM1206XF	C307	87-010-822-080		CAP,E 220MFD-4V
TRANSISTOR				C308	87-010-822-080		CAP,E 220MFD-4V
	S6-7A1-037-K00		TR,2SA1037KT146-R/S	C311	84-439-620-010		CAP,E 470MFD-4V
	89-324-122-080		TR,2SC2412KT146-R/S	C313	87-010-822-080		CAP,E 220MFD-4V
DIODE				C315	87-010-498-010		CAP,E 10MFD-16V
	S0-041-480-000		DIODE,IN-414B	C320	84-439-620-010		CAP,E 470MFD-4V
	87-001-142-010		DIODE,1SS294	C321	87-010-822-080		CAP,E 220MFD-4V
	87-017-987-010		C-LED,SLM-13MW(GRN)	C325	87-010-044-080		CAP,E 47-4V
	87-001-762-010		C-LED,SLM-130W	CF01	S0-004-550-030		CER,FIL SFU-455B
	87-020-508-010		C-LED,SLM-13VW(RED)	CF04	S1-660-260-000		CER,RESO CSB456F16
MAIN C.B				J201	S0-380-713-500		JACK HP 3.5MM
	S0-004-380-010		CER,FIL KMFC428-Z	J301	S0-380-713-500		JACK HP 3.5MM
BPF1	S1-000-080-010		FILTER BANDPASS <EXCEPT YV>	J302	S1-039-040-000		JACK,DC
C102	87-010-044-080		CAP,E 47-4V	L101	S1-910-300-000		COIL,ANT ASSY
C104	87-010-076-810		CAP,E 22MFD-6.3V	L102	S0-700-250-040		FM COIL 7T2.5MM DIA 0.4MM <EXCEPT YV>
C111	87-016-073-080		CAP,E 1MFD-50V	L102	S0-700-300-040		COIL,FM DIA 0.4MM <YV>
C203	87-010-418-080		CAP,E 3.3MFD-25V	L103	S0-500-300-040		COIL,FM DIA 0.4MM <EXCEPT YV>
C204	87-010-418-080		CAP,E 3.3MFD-25V	L103	S0-700-250-040		FM COIL 7T2.5MM DIA 0.4MM<YV>
C205	87-010-498-010		CAP,E 10MFD-16V	L301	87-003-097-010		COIL,1UH
C206	87-010-498-010		CAP,E 10MFD-16V	L302	87-003-097-010		COIL,1UH
C211	87-010-418-080		CAP,E 3.3MFD-25V	L303	87-003-097-010		COIL,1UH
C212	87-010-418-080		CAP,E 3.3MFD-25V	L304	87-005-686-010		COIL,15UH
C213	87-010-418-080		CAP,E 3.3MFD-25V	L305	87-005-686-010		COIL,15UH
C214	87-010-418-080		CAP,E 3.3MFD-25V	S101	S2-300-211-010		SW,SLIDE 2P3T
C215	87-010-498-010		CAP,E 10MFD-16V	S201	S2-210-211-000		SW,SLIDE 2P2T
C216	87-010-498-010		CAP,E 10MFD-16V	S202	S4-202-240-000		SW,PUSH
C221	87-016-073-080		CAP,E 1MFD-50V	S203	S2-210-211-000		SW,SLIDE 2P2T
C222	87-016-073-080		CAP,E 1MFD-50V	S204	S0-017-160-000		SW,LEAF
C225	87-010-498-010		CAP,E 10MFD-16V	S301	S2-210-211-000		SW,SLIDE 2P2T
C226	87-010-044-080		CAP,E 47-4V	S302	S2-210-211-000		SW,SLIDE 2P2T
C227	87-016-073-080		CAP,E 1MFD-50V	S303	S2-210-211-000		SW,SLIDE 2P2T
C228	87-016-073-080		CAP,E 1MFD-50V	SP1	S1-440-004-200		SPEAKER 4-0.4W
C229	87-010-821-040		CAP,E 100MFD-4V	T1	S0-037-300-550		IFT,NC-373 5.5MM(YEL)
C230	87-010-498-010		CAP,E 10MFD-16V	T2	S0-021-600-550		IFT,5PNR-A216H05.5MM(RED)
C231	87-010-822-080		CAP,E 220MFD-4V	VC1	S3-221-250-010		PVC,AM/FM <EXCEPT YV>
C233	87-016-073-080		CAP,E 1MFD-50V	VC1	S3-221-250-020		PVC,AM/FM <YV>
				VR301	S1-030-030-020		RES,VARIABLE
				VR302	S5-020-830-010		SFR,DIA 6MM 5KB
				LED C.B			
BPF1	S1-000-000-010		FILTER BANDPASS <YV>				

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding



抵抗部品コード
Resistor Code

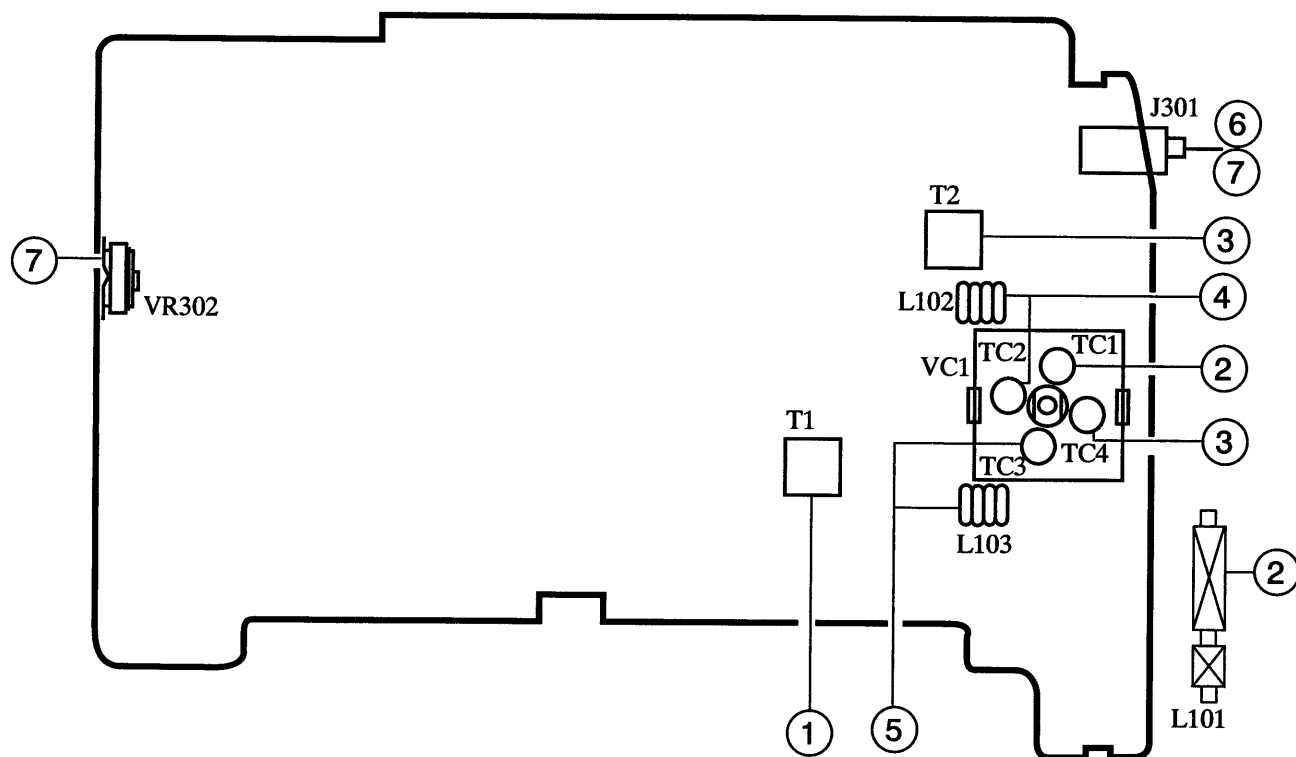
桁表示
Figure
抵抗値
Value of resistor

チップ抵抗
Chip resistor

Wattage 容量	Type 種類	Tolerance 許容誤差	Symbol 記号	Dimensions/寸法 (mm)				Resistor Code : A 抵抗コード : A
				Form/外形	L	W	t	
1/32W	1608	± 5 %	CJ		1.6	0.8	0.35	108
1/10W	2125	± 5 %	CJ		2	1.25	1.45	118
1/8W	3126	± 5 %	CJ		3.2	1.6	0.5 ~0.7	128

ADJUSTMENT

A MAIN C.B

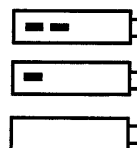


<RADIO SECTION>

1. AM IF Adjustment
T1 455kHz
2. AM Tracking Adjustment
TC1 600kHz
L101 1400kHz
3. AM Frequency Range Adjustment
T2 515±8kHz
TC4 1635±20kHz
(Y,YL,YJ,YZ,YV)
TC4 1750±30kHz (YU)
4. FM Tracking Adjustment
L102 88MHz
(Y,YL,YJ,YZ,YU)
L102 65MHz (YV)
TC2 108MHz
5. FM Frequency Range Adjustment
L103 87.4MHz
(Y,YL,YJ,YZ)
L103 87.5MHz (YU)
L103 64±0.5MHz (YV)
TC3 108.3MHz
(Y,YL,YJ,YZ)
TC3 109±0.5MHz
(YU,YV)

<TAPE PLAYER SECTION>

6. Azimuth Adjustment
Settings : • Alignment tape : TTA - 320
• Test point : PHONES JACK (J301)
• Adjustment point : Azimuth adjustment screw
Method : Play back the alignment tape and adjust the screw so that the 8 kHz output is maximum .
7. Tape Speed Adjustment
Settings : • Alignment tape : TTA-100 (TTA - 111S)
• Test point : PHONES JACK(J301)
• Adjustment location : VR302
• DOLBY NR : OFF
• SUPER BASS : OFF
Method : Play back the alignment tape, adjust VR302 so that frequency is 3000Hz ± 10Hz .
8. Battery Remaining Level Display
Settings : • Apply a voltage to the battery terminals from a stabilized power supply.
• Set the volume to "0".
Method : Decrease the output voltage of the stabilized power supply from 9V and check that each indicator turns off at the following voltages.
Voltage at which FULL turns off 7.4 ± 3V
Voltage at which MID turns off 6.6 ± 2.6V
Voltage at which EMP turns off 6.4 ± 2.35V

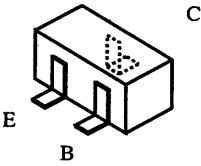


PRACTICAL SERVICE FIGURE

TRANSISTOR ILLUSTRATION

<TAPE PLAYER SECTION>

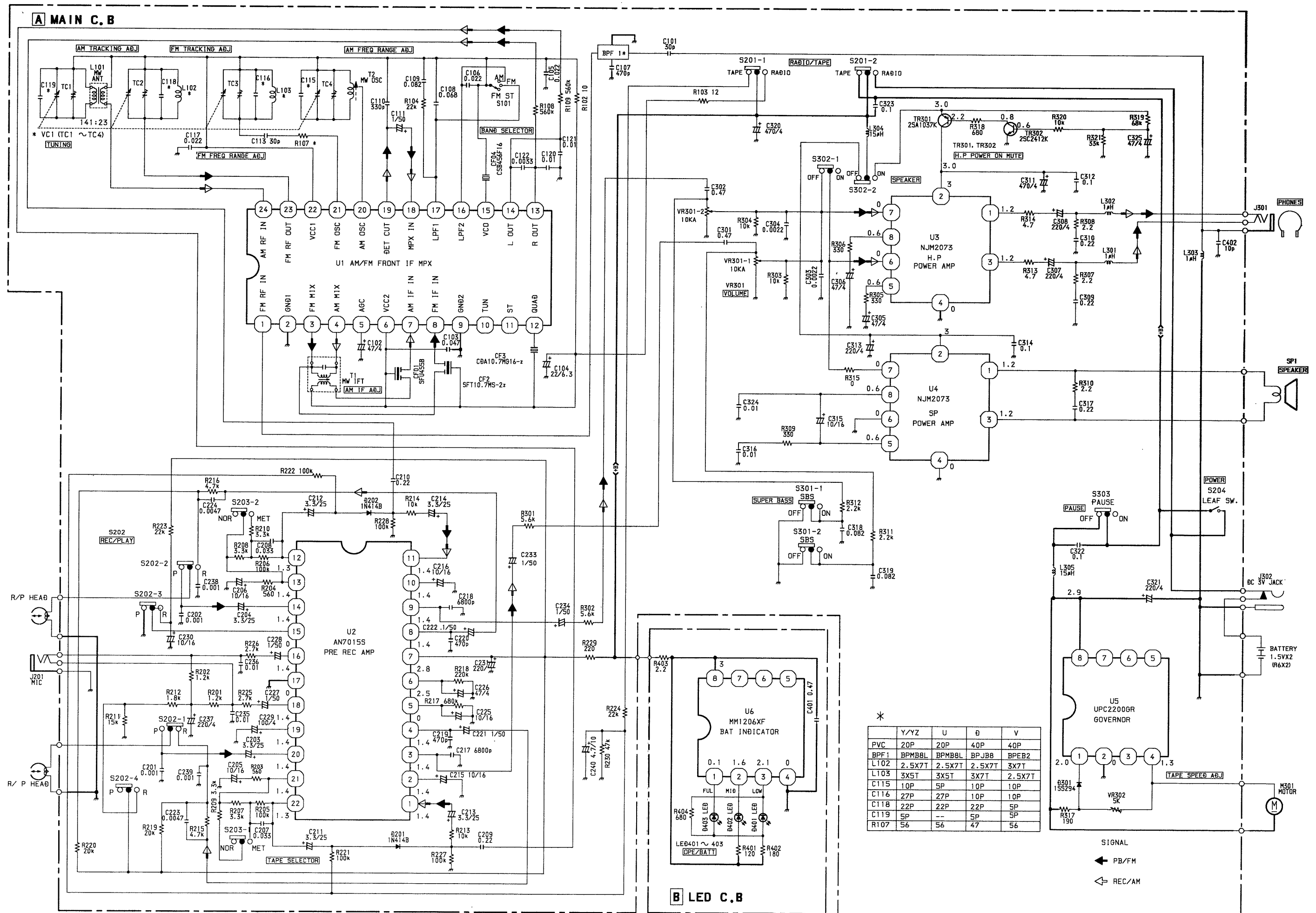
Tape speed : 3000Hz ± 10Hz
Wow & flutter : Less than 0.35% (RMS)
F.F time : 100 - 170sec
REW time : 110 - 170sec
S/N ratio : More than 45dB (DC, PB)
Distortion : Less than 8% (DC, PB)
Noise level : Less than 3.0mV
(Vol MAX, DC)
Erase ratio : More than 28dB
Frequency response : 125Hz ± 6dB
(TTA - 310,1kHz,0dB)

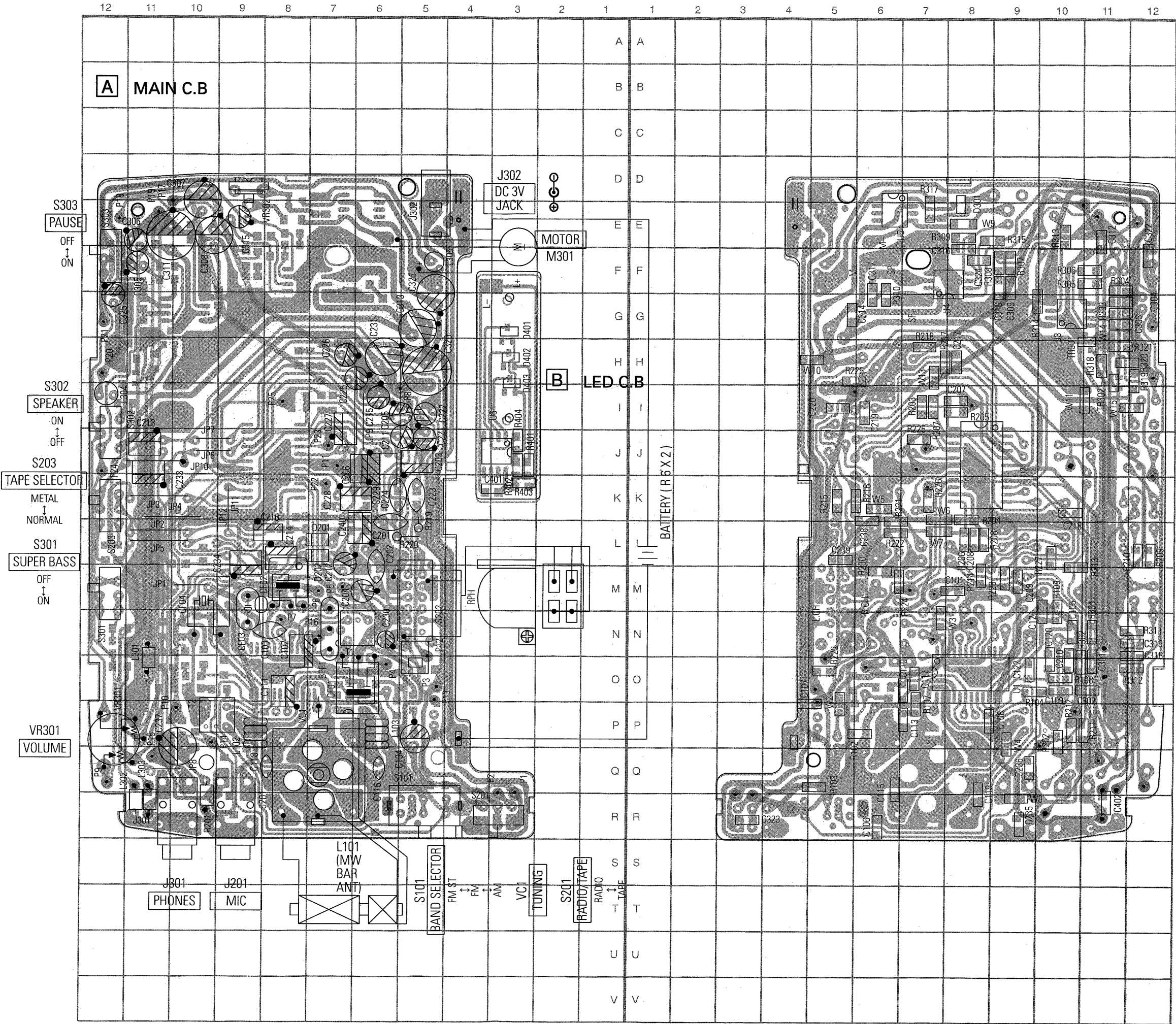
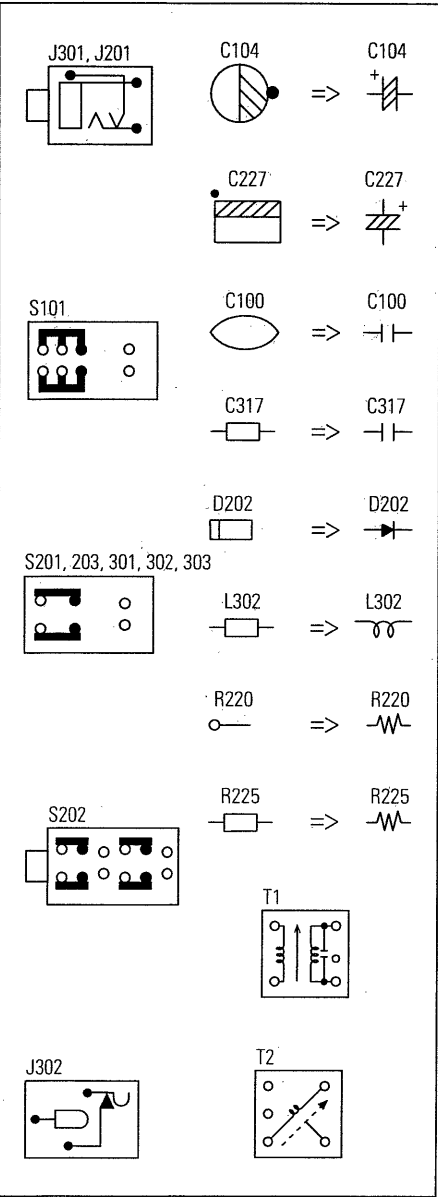


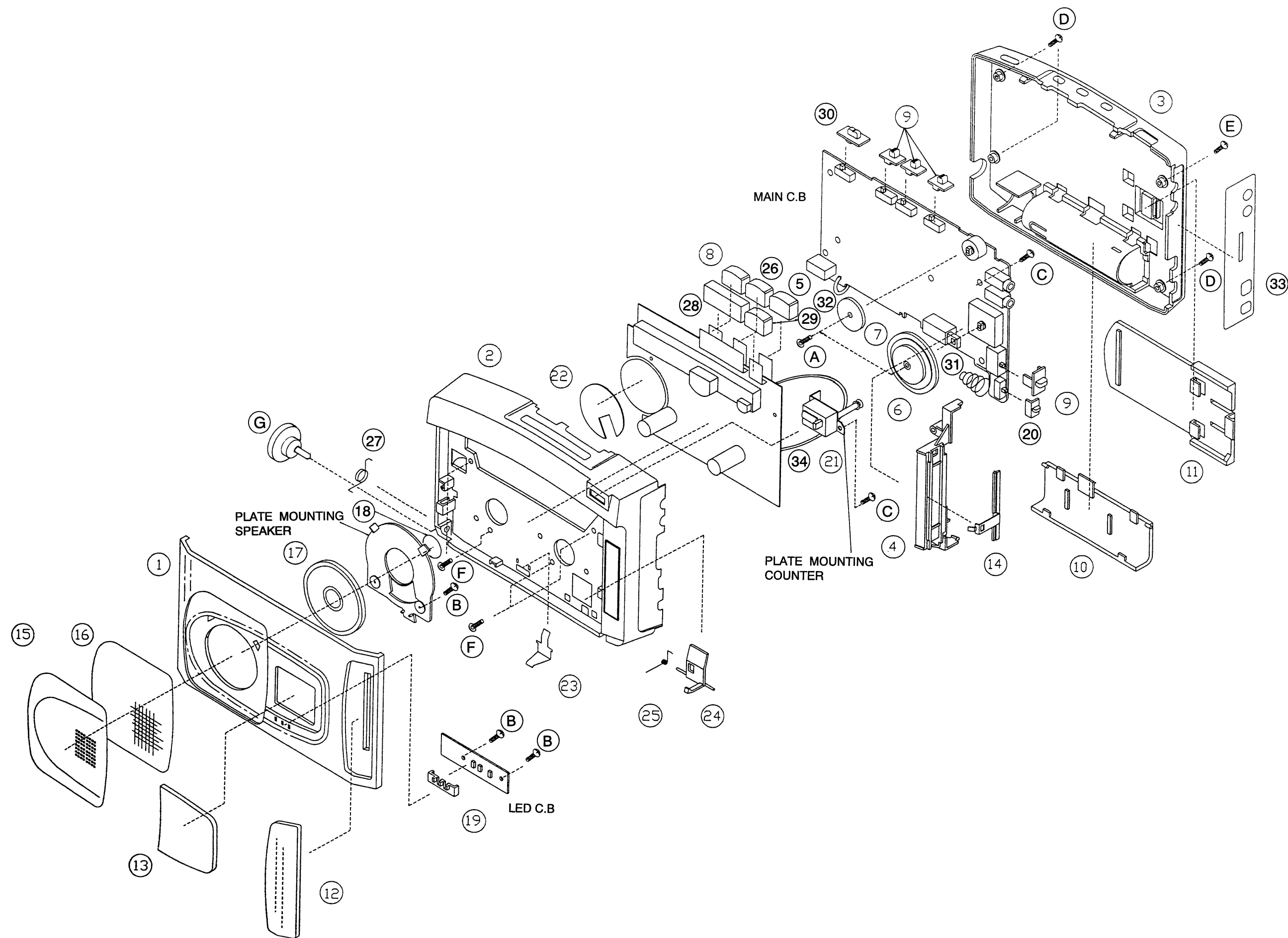
2SA1037
2SC2412

<RADIO SECTION>

Sensitivity :
(IHF, THD 3%) FM Less than 18dB
(76/88,94/98,108.0MHz)
(S/N 10dB) MW Less than 58dB (600kHz)
Less than 56dB (1000kHz)
Less than 55dB (1400kHz)
Intermediate frequency : FM 10.7MHz
AM 455kHz
FM stereo separation : FM More than 20dB (98.5MHz)





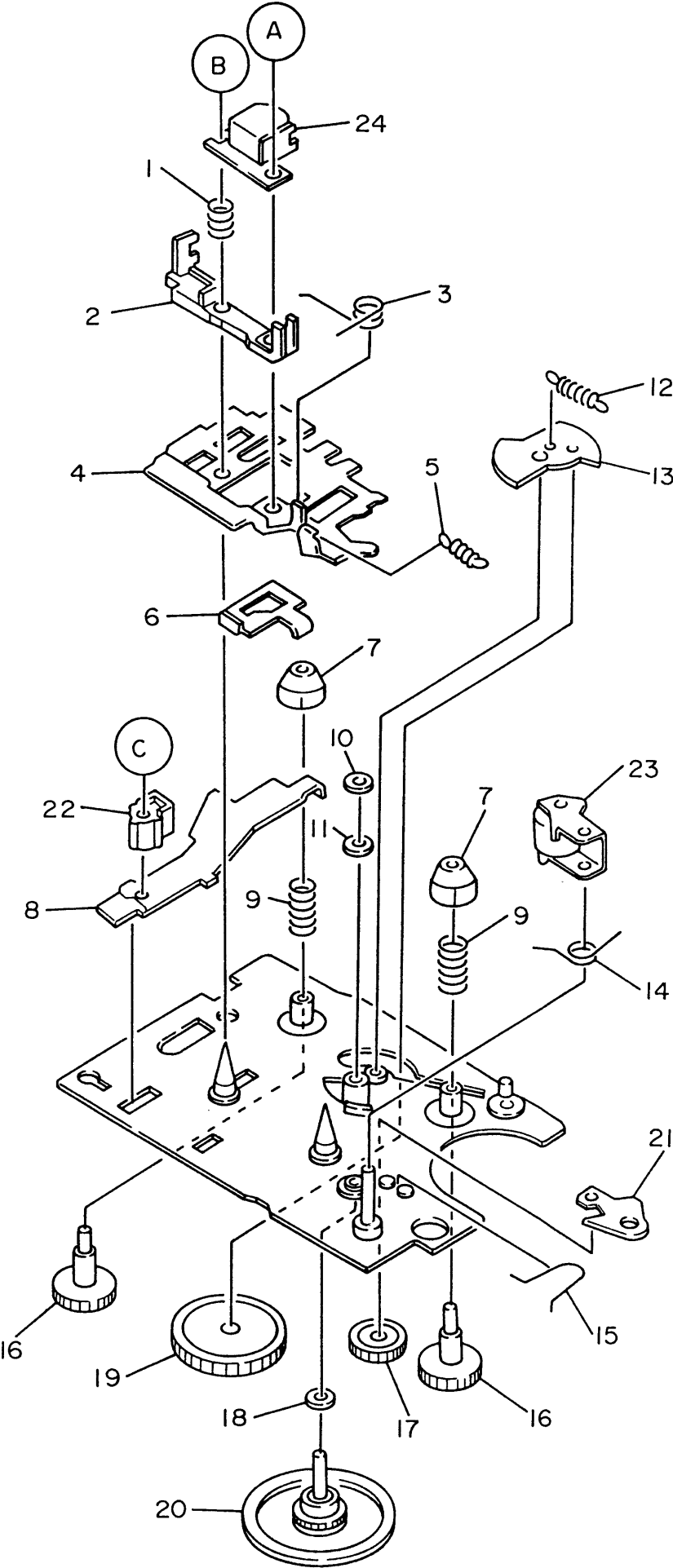


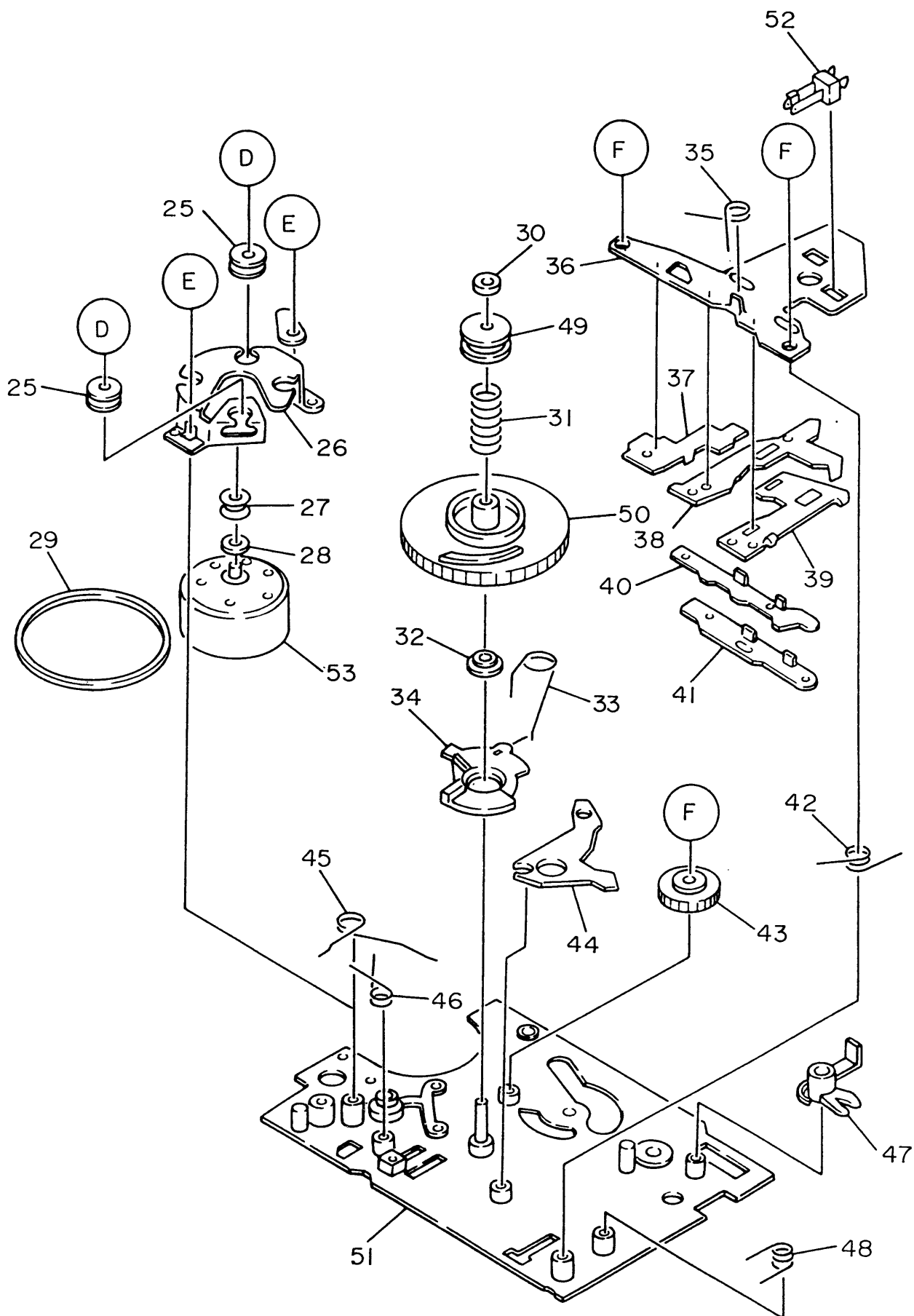
MECHANICAL PARTS LIST 1/1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S0-418-030-100		DOOR,CASS<EXCEPT 147WYU>
1	S0-418-030-300		DOOR,CASS<147WYU>
2	S0-418-010-100		CAB,TOP(BLK)<EXCEPT 145WYU>
2	S0-418-440-100		CAB,TOP(BLK)<145WYU>
3	S0-418-020-100		CAB,BOTTOM
4	S0-418-160-000		BRACKET,DIAL(BLK)
5	S0-418-040-000		KNOB,REW(BLK)
6	S0-418-180-000		KNOB,TUNING(BLK)
7	S0-418-170-000		KNOB,VOL(BLK)
8	S0-418-070-000		KNOB,STOP(BLK)
9	S0-418-120-000		KNOB,BAND(BLK)
10	S0-418-150-010		DOOR,BATT
11	S0-418-490-000		BELT,CLIP
12	S0-418-200-100		LENS,DIAL<EXCEPT YU,YV>
12	S0-418-200-300		LENS,DIAL<YU>
12	S0-418-200-400		LENS,DIAL<YV>
13	S0-418-210-100		LENS,DISPLAY
14	S0-418-190-000		POINTER 418-19
15	S0-418-220-010		GRILL SPEAKER
16	S0-418-420-0S0		FELT SPKR
17	S1-440-004-200		SPEAKER 4-0.4W
18	S0-418-470-000		SPKR,PLATE COVER
19	S0-418-360-000		LENS,LED BATT
20	S0-418-100-000		KNOB,FUNCTION(BLK)
21	S3-450-030-000		COUNTER
22	S0-418-450-300		PLATE SHILD MOTOR
23	S0-418-270-000		PLATE SPR TAPE
24	S0-418-090-000		STOPPER RECORD(BLK)
25	S0-418-290-000		SPR,STOPPER RECORD
26	S0-418-040-000		KNOB,FF(BLK)
27	S0-418-280-000		SPR,DOOR CASS
28	S0-418-050-000		KNOB,PLAY(BLK)
29	S0-418-060-100		KNOB,RECORD(BLK)
30	S0-418-110-000		KNOB,PAUSE(BLK)
31	S0-418-260-000		SPR,BATT(-)
32	S0-418-250-000		SPR,BATT(+)
33	S0-418-390-100		PLATE,FUNCTION
34	S0-418-380-000		BELT,COUNTER
A	87-067-494-010		SCREW,1.7-4 PM
B	87-067-556-010		SCREW,ST1.4-3 PM(BLK)
C	87-351-553-310		SCREW,ST2-6 PAB
D	87-353-037-210		SCREW,ST2-10 PAB(BLK)
E	87-357-042-010		SCREW,ST2-18 PAB(BLK)
F	87-353-529-010		SCREW,1.7-4 PM(BLK)
G	S0-418-230-000		SCREW,HINGE DOOR CASS(BLK)

TAPE MECHANISM EXPLODED VIEW 1/1





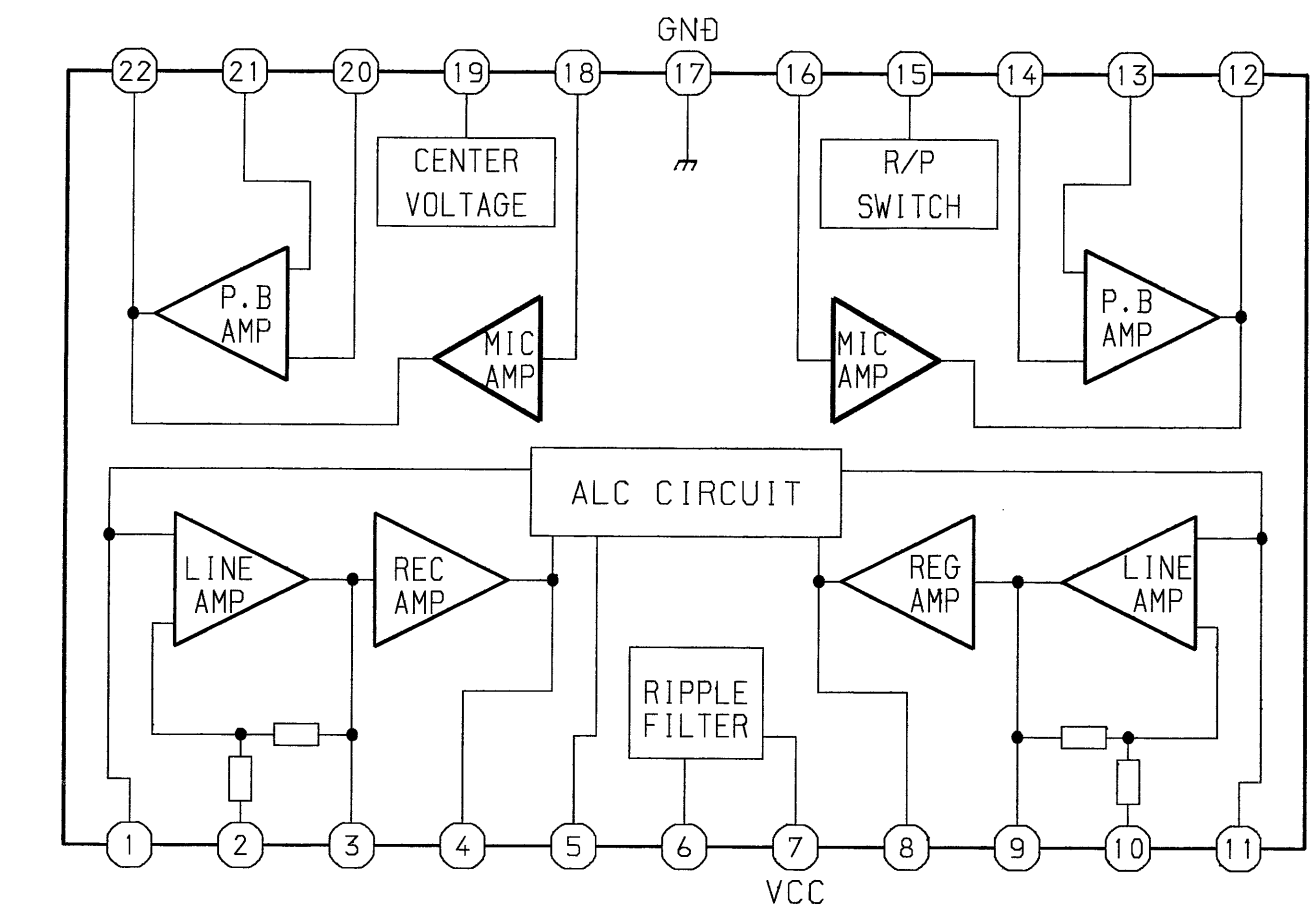
TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

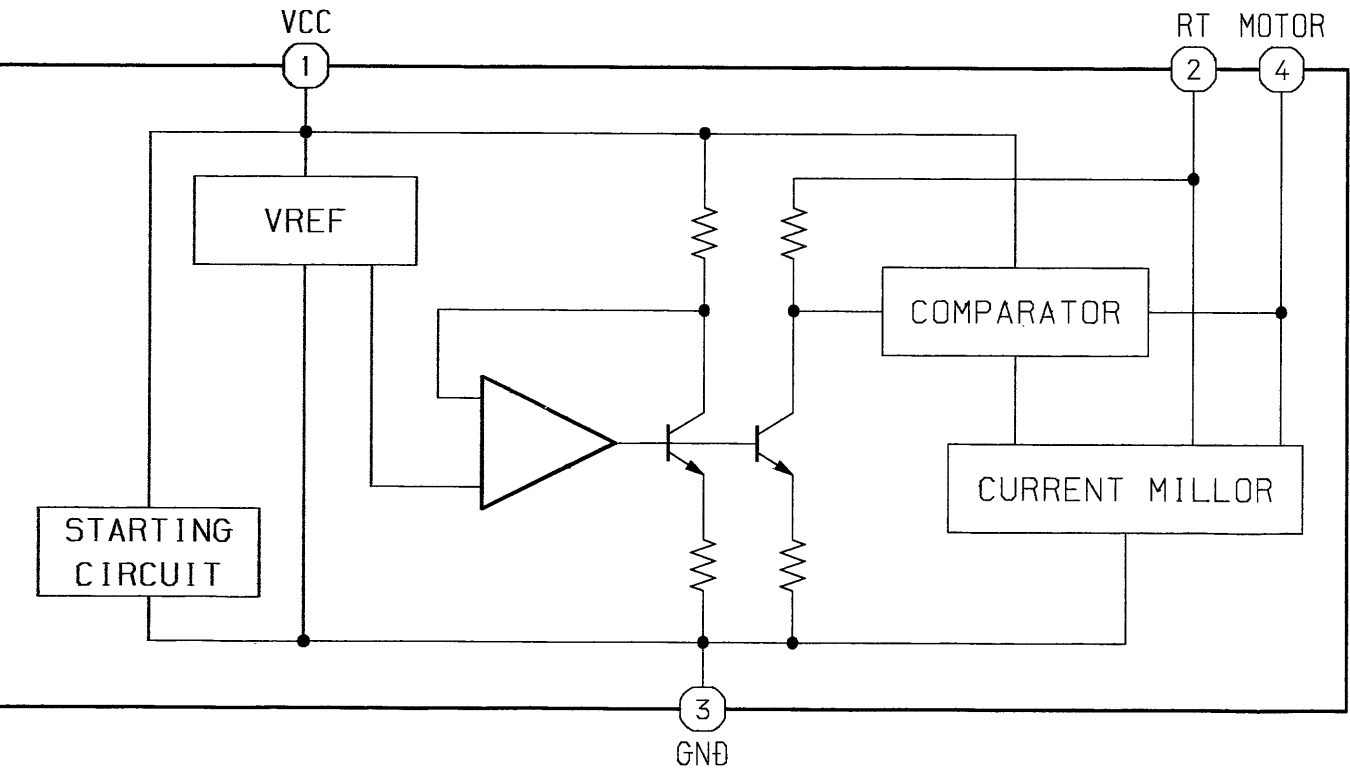
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION	REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S0-108-140-510		SPRING	31	S0-108-143-953		SPRING
2	S1-826-530-290		GUIDE HEAD	32	S1-820-040-610		BUSH GEARDE
3	S0-108-240-520		SPRING	33	S0-108-243-380		SPRING
4	S1-811-230-270		CHASSIS HEAD	34	S1-823-942-330		LEVER AS
5	S0-108-042-150		SPRING	35	S0-108-241-960		SPRING
6	S1-815-140-280		PLATE PLAY	36	S1-810-030-480		GUIDE LEVER
7	S1-822-831-38T		REEL	37	S1-815-441-640		LEVER STOP
8	S1-815-030-440		LEVER REC	38	S1-815-341-420		LEVER FF
9	S0-108-140-49T		SPRING	39	S1-815-241-430		LEVER REW
10	S6-X03-403-0S0		WASHER	40	S1-815-931-650		LEVER LOCK
11	S2-1X0-320-250		WASHER	41	S1-815-941-630		LEVER SWITCH
12	S0-108-040-590		SPRING	42	S0-108-240-550		SPRING
13	S1-823-941-770		LEVER CENTER GEAR	43	S1-822-240-190		GEAR FF
14	S0-108-241-890		SPRING	44	S1-813-941-440		LEVER FR
15	S0-108-240-480		SPRING	45	S0-108-240-530		SPRING
16	S1-822-241-39T		GEAR REEL	46	S0-108-240-570		SPRING
17	S1-822-240-360		GEAR PLAY	47	S1-823-930-460		ARM REC
18	S2-1X0-400-250		WASHER	48	S0-108-240-850		SPRING
19	S1-822-240-410		GEAR CENTER	49	S1-808-342-390		FRICTION ASSY
20	S1-809-342-060		FLYWHEEL ASSY	50	S1-809-332-380		FRICTION ASSY
21	S1-809-340-330		PLAY ARM ASSY	51	S1-809-331-520		MECHA CHASSIS ASSY
22	S1-809-940-950		EH ASSY	52	SM-SW1-716-CV0		SW LEAF
23	S1-809-340-090		PINCH ARM ASSY	53	SB-DH3-B08-000		MOTOR BDH3B08
24	SM-S15-RBA-2N1		RP HEAD	A	SG-SD1-0A2-005		SCREW
25	S1-806-340-310		RUBBER MOTOR	B	SS-N10-A20-05F		SCREW
26	S1-810-032-350		BRACKET MOTOR	C	SP-GSD-20A-201		SCREW
27	S0-332-642-300		PULLEY MOTOR	D	SP-BE1-710-310		SCREW
28	S1-5X0-280-350		WASHER	E	SS-D10-A16-030		SCREW
29	S0-208-340-050		BELT	F	SP-BE1-402-700		SCREW
30	S5-X03-403-0S0		WASHER				

IC BLOCK DIAGRAM

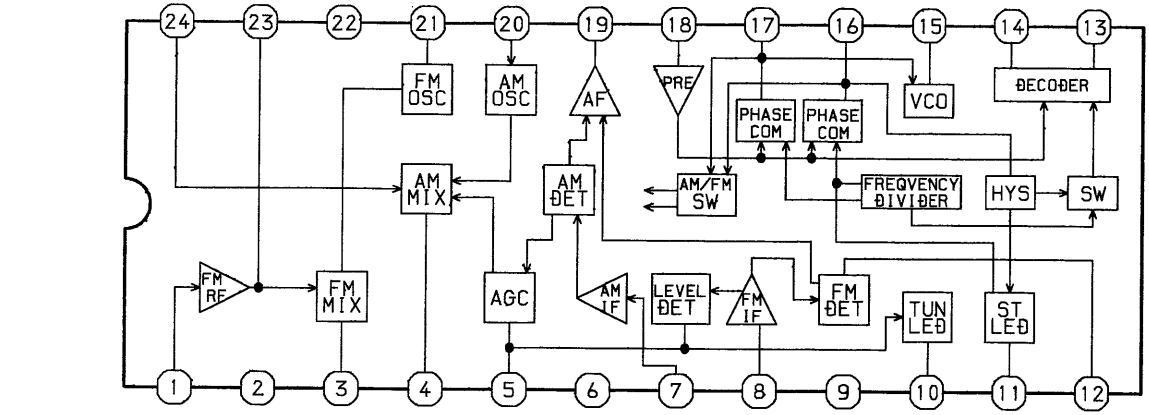
IC, AN7015S



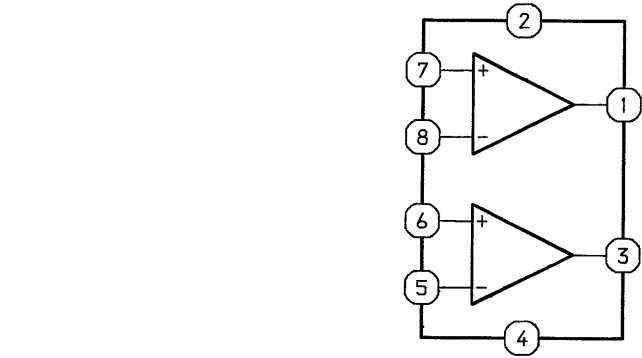
IC, PC2200H



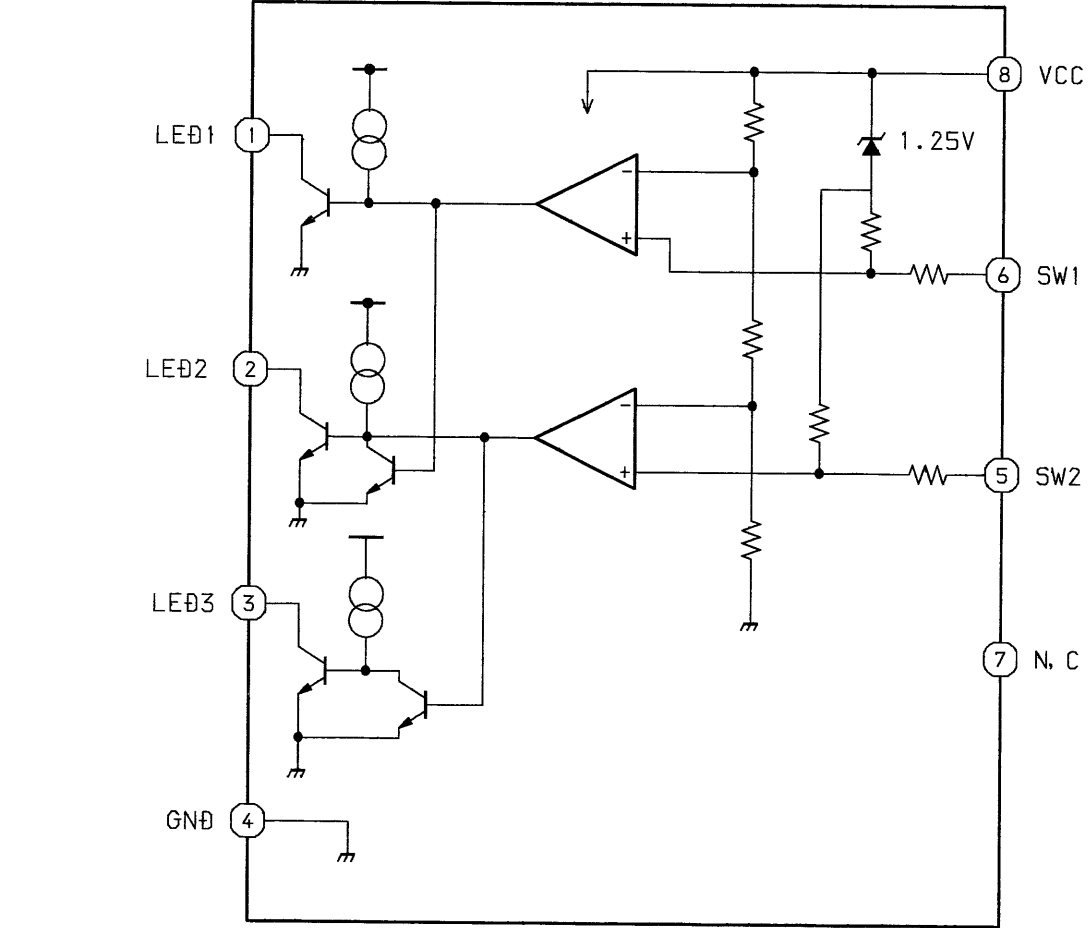
IC, TA8122AF



IC, NJM2073M



IC, MM1206XF



ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S0-100-250-000		HP SET HP-25NA <EXCEPT YU>
1	S0-100-710-000		HP SET HP-A071 <YU>
2	87-041-065-010		MIC, STEREO EXT CM-S35A
3	S0-418-510-100		IB <EXCEPT YU,YV>
3	S0-418-510-300		IB <YU>
3	S0-418-510-400		IB <YV>
3	S0-418-510-200		IB (EX-DFI) <YZ>

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, SERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G - -	
G - -	
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